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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,493	08/19/2003	Aurelio Pianciola	AVAN/000841.C1	5478
47389	7590	10/27/2005		
PATTERSON & SHERIDAN, LLP 3040 POST OAK BLVD SUITE 1500 HOUSTON, TX 77095			EXAMINER HELLNER, MARK	
			ART UNIT	PAPER NUMBER
			3663	
DATE MAILED: 10/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/643,493		PIANCIOLA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Mark Hellner		3663	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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**DETAILED ACTION*****Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 33 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,643,058.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the following comparison shows:

Claim 33 of the present application recites:

33. (new) A method for coupling a signal radiation at wavelength  $\lambda_s$ , a first pump radiation at a wavelength  $\lambda_{p1}$  and a second pump radiation at wavelength  $\lambda_{p2}$ , comprising the steps of: providing (a) a first and a second port for receiving respectively the first and the second pump radiation, (b) a third port for the signal radiation and (c) a fourth port; and combining the signal radiation and the first and second pump radiation in the fourth port through a reversal of the direction of propagation of the first pump radiation from the first port to the fourth port.

Art Unit: 3663

Claim 1 of USPN 6,643,058 recites:

1. Optical pumping unit comprising a first pump source adapted to emit a first pump radiation at wavelength  $\lambda_{p1}$ ; a second pump source adapted to emit a second pump radiation at wavelength  $\lambda_{p2}$ , with the wavelength  $\lambda_{p2}$  different from the wavelength  $\lambda_{p1}$ ; and a common coupling section comprising a first and a second port connected to the first and second pump source for respectively receiving the first and the second pump radiation; a third port for a signal radiation at wavelength  $\lambda_s$ ; and a fourth port; wherein said coupling section is adapted to combine, in the fourth port, the signal radiation and the first and second pump radiation by means of a reversal of the direction of propagation of the first pump radiation from the first port to the fourth port.

It is clear that the comparison above demonstrates that the method recited by claim 33 of the present application is taught by the functional language of claim 1 of USPN 6,643,058.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

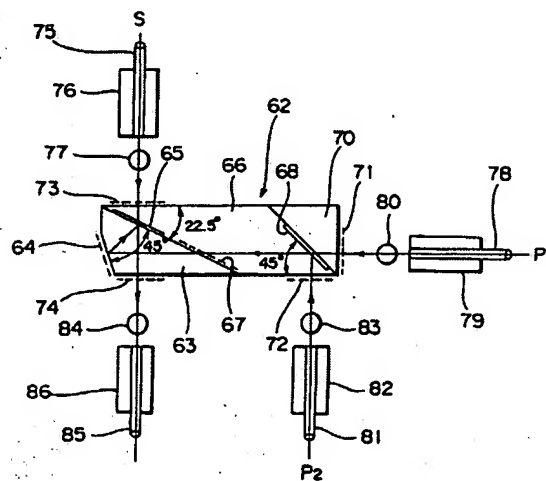
Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 444 694 A.

Figure 8 of EP 0 444 694 A discloses a structure for coupling signal radiation at a wavelength (S), a first pump radiation (P2) and a second pump radiation (P1), the structure performing the steps of: providing a first (72) and second (71) port for receiving respectively the first and second pump radiation, a third port (73) for the signal

radiation and a fourth port (74); and combining the signal radiation and the first and second pump radiation in the fourth port through a reversal of direction of the first pump radiation from the first port to the fourth port via surfaces 68, 64 and 65.

Figure 8 is shown below for illustration.

FIG. 8



Any inquiry concerning this communication should be directed to Mark Hellner at telephone number 571 272 6981.

Mark Hellner

Primary Examiner

AU 3663

Mark Heller